

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listing of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A bandwidth monitoring method suitable for use in a network on which specific type of packets are transferred in preference to packets other than the specific type of packets, comprising the steps of:

~~transmitting a specific type of packets in preference to packets other than the specific type of packets;~~—

~~judging whether an inputted packet corresponds to the specific type of packets according to a value in a header of the packet;~~

~~receiving a packet;~~

~~detecting flow of the received packet by judging whether the received packet coincides with a flow condition pre-defined with at least one of in-header information items other than priority information;~~

~~determining whether the received packet is of the specific type or not based on the result of the detected flow;~~

monitoring whether the specific type of packets violate a contract bandwidth under contract with a source of the specific type of packets; and

when the packets of the specific type do not violate the contract bandwidth and the ~~value in the header of the inputted~~ received packet does not correspond to a

~~specific value indicative of the specific type of packets, transmitting the inputted~~  
~~received packet after converting the packet it to a packet having the a specific value~~  
indicative of the specific type of packet in its header.

2-3. (Canceled)

4. (Currently Amended) The bandwidth monitoring method according to claim 1, ~~wherein said further comprising the steps of:~~

receiving a packet whose header has a priority field indicating priority information; and

said judging as to whether the received packets correspond to the specific type of packets is performed according to a value in the priority field.

5. (Currently Amended) The bandwidth monitoring method according to claim 1,

wherein said monitoring is carried out by using a leaky bucket algorithm with a first depth of bucket when the received packet does not correspond to the specific type of packets, and a leaky bucket algorithm with a second depth of bucket different from the first depth when the received packet corresponds to the specific type of packets, thereby to judge whether or not said packet violates the contract bandwidth being under contract with the source of the packet.

6. (Currently Amended) A bandwidth monitoring method for use in a network on which specific type of packets are transferred in preference to packets other than the specific type of packets, comprising the steps of:

~~transmitting a specific type of packets in preference to packets other than the specific type of packets;~~

receiving a packet whose header has no priority information;

detecting flow of the received packet by judging whether the received packet coincides with a flow condition pre-defined with at least one of in-header information items other than priority information;

~~determining whether an inputted~~ the received packet corresponds to the specific type of packets according to ~~a value in a header of the packet~~ the result of the flow detection;

monitoring whether the specific type of packets violate a contract bandwidth under a contract with a source of the specific type of packets; and

transmitting the ~~inputted~~ received packet, when a bandwidth being used by ~~the source of the packet of the specific type~~ of packets is less than or equal to a first bandwidth smaller than the contract bandwidth and ~~the value in the header of the inputted~~ received packet does not correspond to ~~a specific value indicative of the specific type of packets, after converting the packet~~ it to a packet having the specific value indicative of the specific type of packet in its header.

7. (Currently Amended) The bandwidth monitoring method according to claim 6, further comprising the step of:

transmitting the received packet as a packet other than the specific type of packets when the bandwidth being used by the source of the packet exceeds the first bandwidth and the received packet does not correspond to the specific type of packets.

8. (Currently Amended) The bandwidth monitoring method according to claim 6, further comprising the step of:

transmitting the received packet as a packet other than the specific type of packets when the bandwidth being used by the source of the packet exceeds the contract bandwidth and the received packet corresponds to the specific type of packets.

9. (Currently Amended) The bandwidth monitoring method according to claim 6,

\_\_\_\_\_ wherein said monitoring method is carried out by using a leaky bucket algorithm with a first depth of bucket when the received packet does not correspond to the specific type of packets, and a leaky bucket algorithm with a second depth of bucket when the received packet corresponds to the specific type of packets, said

first depth being different from said first depth, thereby to judge whether or not said packet violates the contract bandwidth being under contract with the source of the packet.

10-20. (Canceled)

21. (Currently Amended) A bandwidth monitoring method suitable for use in a network, comprising the steps of:

receiving a packet whose header has no priority information;

detecting flow of the received packet by judging whether the received packet coincides with a flow condition pre-defined with at least one of in-header information items other than priority information;

judging whether anthe inputted-received packet is one of specific type of packets to be transmitted in preference to packets having a type other than the specific type, according to a value in a header of the inputted packet the result of the flow detection;

monitoring whether the specific type of packets violate a contract bandwidth under a contract with a source of the specific type of packets; and

when the packets of the specific type do not violate the contract bandwidth and the value in the header of the inputted-received packet does not correspond to a specific value indicative of the specific type of packets, providing the specific value

Appl. No. 09/585,389  
Amendment dated July 7, 2006  
Reply to Office Action of January 9, 2006

NIT-200

indicative of the specific types of packets to the ~~inputted~~ received packet and  
transmitting the ~~inputted~~ received packet with the specific value in its header.